

Summary

Claims 1-77 were pending. Claims 1 and 14 been rewritten, Claims 21-77 cancelled and Claim 78 added. No new matter has been added as a result of this amendment.

Preliminary Amendment

A Preliminary Amendment was submitted with the Application on September 1, 2003. This Preliminary Amendment is entered in the PAIR system, but does not appear to be addressed by the Examiner in the Office Action. Applicants have enclosed a copy for the Examiner's benefit. Applicants apologize for not noticing this in the previous response. Claims 40-77 added in the Preliminary Amendment are directed to the non-elected invention. Applicants have cancelled Claims 21-77.

Claim Rejections

Claims 14 and 20 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Applicants have rewritten Claim 14 as required by the Examiner. Applicants traverse the rejection of Claim 20 as the limitation "the upper electrode layer" was amended in the manner specified by the Examiner in the Preliminary Amendment submitted with the Application on September 1, 2003.

Claims 1, 4, 9-12, 15-17 and 19 were rejected under 35 U.S.C. §102(e) as being anticipated by Zheng (U.S. Patent Application Publication 2004/0196598); Claim 1, 9-11, 14, and 16-17 were rejected under 35 U.S.C. §102(a), (b), and (e) as being anticipated by Umetsu (U.S. Patent Application Publication 2002/0036878 and JP 2002-111095); and Claim 15 was rejected under 35 U.S.C. §103(a) as being unpatentable over Umetsu in view of Komuro (U.S. Patent Application Publication 2002/0097536). Claims 2-3, 5-8, 13 and 18 were objected to as being dependent on a rejected base claim but the Examiner indicated they would be allowable if rewritten in an independent form including all of the limitations of the base claim and any intervening claims.

Applicants thank the Examiner for indicating that allowable subject matter exists. However, Applicants have rewritten Claim 1 and submits that Claims 1-20 and Claims 78-97 are patentable over the cited references

Claim 1 recites that the second free magnetic layer, which is distinct from the first free magnetic layer, is provided from an upper surface of the second antiferromagnetic layer to an upper surface of the first free magnetic layer.

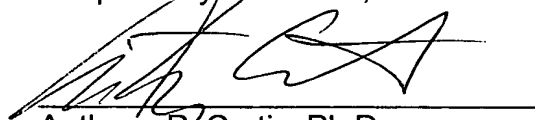
Neither Zheng nor Umetsu anticipate or disclose the arrangement of Claim 1. As the Examiner indicates, Zheng discloses a free magnetic layer on a different multilayer laminate (which is within the track width spacing) but does not disclose two distinct free magnetic layers in the track width spacing. Similarly, Zheng discloses two free magnetic layers that are planar, but does not disclose two distinct free magnetic layers in the track width spacing.

Accordingly, pending Claims 1-20 and 78 are patentable over the cited references.

Conclusion

Applicants respectfully submit that all of the pending claims are in condition for allowance and seek an early allowance thereof. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, she is respectfully requested to contact the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Anthony P. Curtis', is written over a horizontal line.

Anthony P. Curtis, Ph.D.
Registration No. 46,193
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200